

# FOXROX ELECTRONICS

The Foxrox Hot Silicon Fuzz is based on the most famous fuzz of all, the Dallas Arbiter FuzzFace. The FuzzFace has gone down in history as one of the most erratic, but coolest sounding fuzz effects ever made. They all sounded slightly different due to a number of variables including temperature, transistor gain and quality, battery level and pickup output levels. FuzzFaces could sound dull, bright, smooth, gritty, and sometimes so choppy that they were unusable.

There were two different types of FuzzFaces, the original PNP Germanium version and the NPN Silicon version which followed. The Foxrox Hot Silicon Fuzz is based on the NPN Silicon FuzzFace.

## Hot Silicon

This Fuzz pedal specializes in the hotter, brighter side of Fuzz. The transistors are high gain silicon (BC109C) which are hand picked and custom matched for the best sounds. The sound is more high-endy than other versions, and there is no shortage of gain and sustain at normal playing levels. At high gain settings, it can get unruly, breaking into oscillation and noise. Under certain conditions it can even pick up radio broadcasts, although measures have been taken to avoid this. It can also oscillate when fed by a wah wah pedal. While these might seem like bad things they are part of what it takes to recreate certain classic sounds, including many of the live Hendrix recordings from 1969 / 1970 such as Woodstock, Band of Gypsies and Isle of White. With the right settings, this fuzz can be tamed, but the out-of-control aspect is what makes it unique. If you would prefer that your wah pedal does not interact with the fuzz, check into the "Foxrox Wah Retrofit" (see back page).

# HOT SILICON



### Connections:

Input and Output 1/4" TRS. Battery connection is made when plug is inserted into Input jack. Remove when not in use.

Power - 9V Battery or 9 Volts DC, negative ground. A 2.1 mm DC jack located on the back.

## **Controls**

**FUZZ** - The Fuzz control allows you to back off on the intensity of the fuzz. This is useful when looking for special vintage sounds and when driving more overdrive stages. This is also great if you want to dial in some wimpy fuzz tones for effect. If you want the fuzz to clean up when you roll back your guitar's volume knob, back off a little on the Fuzz control. You can dial in a massive range of great sounds just by playing around with the GRIT control, the FUZZ control, and your guitar's volume and tone controls.

**GRIT** - One thing that makes Hot Silicon different from other similar fuzz boxes is the GRIT control. This knob allows you to fine tune the attack, tone and fuzz level. The control is subtle, but very effective. As a continuous control, you can dial in the exact sound you want. Here are some examples of what to expect as you try out different GRIT settings:

**Counter clockwise:** Dull loud tone. Sounds great when overdriving a tube amp, or pushing an already overdriven amp over the top. This is a very fat fuzz sound that can be heard on lots of old recordings from the '60s and '70s.

**Middle:** Even tone with lots of fuzz and sustain. This is the most user-friendly of all the settings. The tone is very round, without sputter. If you like to clean up your sound by turning down your guitar's volume knob, this is where the GRIT control should be - the 10:00 - 1:00 settings work the best.

**Clockwise:** Clipped, farty and burnt out. If you're looking for some of the nastier fuzz sounds, experiment with GRIT settings in the 2:00 to 5:00 (max) area. The sound gets very choppy while you pick and the sustain trails off abruptly. This sound can be pretty ugly at times, but it's great for reproducing certain vintage tones that originally occurred due to unmatched transistors or drained batteries. Extreme GRIT settings sound great when your amp is turned up loud. Stand near your amp and play around with the feedback.

**VOLUME** - The Hot Silicon Fuzz is set up to have more than enough gain for those who like it LOUD. Changes in the GRIT control have a direct effect on the output level, so you may need to make some volume adjustments while dialing in your sound.

**INPUT TRIM** - Hot Silicon Fuzz includes an internal trim pot that adjusts the amount of loading at the input stage.

## **Adjusting the trim pot - getting the best Wah Wah sounds**

Hot Silicon Fuzz includes a 50K variable resistor at the input of the circuit. This is used to increase the input impedance, which can smooth out the sound of the fuzz by lowering its intensity. A major benefit of this is better performance when fed by a wah wah pedal. Input trim is a very common Fuzz Face modification.

To make the setting with a wah wah pedal, dial in the sound you want on the FUZZ and GRIT controls. Kick in the wah wah pedal. With the unit opened, and the wah going, sample different settings on the trimmer. You will notice that it extends the low end of the wah's sweep. Dial in the sound you like. Be aware that adding resistance at the input of the Fuzz has a couple of side effects:

- 1) You may notice an increased noise level, especially when your guitar's volume is turned down all the way.
- 2) You may also notice that the fuzz loses some of its intensity with your guitar's volume up all the way and the FUZZ control at its maximum setting.

Both of these things are unavoidable due to the nature of the circuit.

## **For those who are serious about WAH:**

If you like to have your wah wah pedal before your Fuzz, and you want to get the widest sweep possible without turning the FuzzCard's trimmer down, you should check out the **FOXROX WAH RETROFIT**. This clever little circuit can be added to just about any inductor-based wah wah pedal to restore the wah's full sweep range when driving low impedance effects, such as Fuzz Faces, or Fuzz Face clones. It also provides the ability to adjust the output volume of your wah pedal, enabling you to cut back the level of a wah that's too loud, or boost the level of a wah pedal that's not loud enough. Check it out at [www.foxroxelectronics.com](http://www.foxroxelectronics.com). It's inexpensive, easy to install, and very effective.

## ***Note about tone -***

Hot Silicon Fuzz uses the same volume control as an original Fuzz Face, 500K. This is very high pot value compared to what you would typically find for a volume control. The result is a loss of high end when the volume is below 90%. This gives the fuzz a "warm" sound. But this is also dependent on the length of guitar cables and the input impedance of whatever the fuzz is feeding. If the Fuzz is directly followed by a buffered effect, it will sound brighter than if it's driving a 20 foot cable over to your amp. If you have true-bypass, time-based effects after your fuzz (flanger, chorus, delay), you may notice that the fuzz becomes brighter when the effect(s) are switched in.